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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,668	06/28/2001	Koichi Furui	SON-2151	2059

7590 07/15/2003

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Washington, DC 20036

EXAMINER
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COLAIANNI, MICHAEL

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 07/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/892,668	<b>Applicant(s)</b> FURUI ET AL.	
	<b>Examiner</b> Michael P Colaianni	<b>Art Unit</b> 1731	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 June 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 and 17-27 is/are pending in the application.
- 4a) Of the above claim(s) 17-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 22-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All   b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                              | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s) _____.  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                     | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. | 6) <input type="checkbox"/> Other: _____.                                   |

### ***Election/Restrictions***

Applicant's election with traverse of Group I, claims 1-6 in the response filed June 20, 2003 is acknowledged. The traversal is on the ground(s) that the cancellation of claims 7-16 leaves fewer claims, which would not pose a burden on the examiner. This is not found persuasive because the non-elected claims are still deemed to be drawn to a separate invention that would pose an additional burden on the examiner.

The requirement is still deemed proper and is therefore made FINAL.

Claims 17-21, 27/21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the amendment filed June 20, 2003. Also, newly added claims 22-27 will be joined with the elected claims 1-6 and examined.

### ***Drawings***

Figures 15-17 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 22-24, 27/22, 27/23, 27/24 are rejected under 35 U.S.C. 102(b) as being anticipated by Merz et al. 3607180.

Merz et al. teach coating frit onto cathode ray tube funnels to seal the face plate to the funnel using a roller assembly having concave and convex portions thereon (Fig. 2, ref. no. 34, 10, 38 and col. 2, lines 64-75).

Merz et al. also teach using a control on the frit coating assembly to regulate the amount of frit applied to the funnel or faceplate (col. 3, lines 30-52, Fig. 2, ref. no. 42, 46, 48, the scraper blade controls how much frit remains on the roll and is thus applied to the object being coated).

Merz et al. also teaches coating a funnel portion of display assembly (Fig. 2, ref. no. 34). Claims 5-6 has been interpreted such that a funnel, a front panel or a screen panel of a flat-type cathode ray tube is coated. Thus, only one of the items needs to be coated by the method to meet the claims. Moreover, the "flat-type cathode ray tube" does not necessarily have to modify the funnel or the front panel in the claim.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 25-26, 27/25, 27/26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merz et al. 3607180 in view of Hiroshi et al. 11-96948.

Merz et al. teach applicant's claimed invention. See the 102(b) rejection above for Merz et al.'s teachings. However, Merz et al. do not teach sealing a flat-type glass tube assembly.

However, Hiroshi et al. teach that it is known to seal several pieces together when manufacturing a flat-type glass tube assembly (Fig. 4(b), as is apparent from the figure, several piece are welded together to make the assembly). Moreover, Merz et al. teach that the concave-convex roller assembly maybe used to seal a wide variety of materials, such as glass to glass, glass to metal, and metal to ceramic (col. 1, lines 13-26). Moreover, Merz et al. show that the faceplate attached to the funnel portion is a flat panel display (Figure 4, ref. no. 63, 34; the faceplate 63 is flat).

It would have been prima facie obvious at the time the invention was made to combine Hiroshi et al.'s flat-type glass tube assembly with Merz et al.'s method of applying glass frit to seal a display assembly because Merz et al. teach that their frit

applying method may be used to seal a wide variety of items made from varying materials.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 3 and 4 use the language "predetermined amount" which is deemed to be indefinite because it is not clear how the "predetermined" amount is determined.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P Colaianni whose telephone number is 703-305-5493. The examiner can normally be reached on Monday to Thursday and alternate Fridays from 9:00 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 703-308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7115 for regular communications and 703-872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

A handwritten signature in black ink, appearing to read "Michael P. Colaianni".

Michael P Colaianni  
Primary Examiner  
Art Unit 1731

MPC  
July 11, 2003

**MICHAEL COLAIANNI  
PRIMARY EXAMINER**